

Fact Sheet



For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-02900008-2015**

Application Received: **August 18, 2014 (Renewal); June 30, 2014 (MM07);
December 29, 2014 (MM08)**

Plant Identification Number: **029-00008**

Permittee: **Ergon Corporation - West Virginia, Inc.**

Mailing Address: **P.O. Box 356, Newell, WV 26050**

Revised: N/A

Physical Location: Newell, Hancock County, West Virginia
UTM Coordinates: 531.25 km Easting • 4495.35 km Northing • Zone 17
Directions: Two miles south of Newell on State Route 2.

Facility Description

Ergon Corporation - West Virginia, Inc. (EWVI) owns and operates a petroleum refinery (SIC 2911 and NAICS 32411) in Newell, West Virginia. The refinery processes crude oil and produces several petroleum products such as diesel, gasoline, kerosene, and crude oils. The facility has the potential to operate twenty-four (24) hours a day for seven (7) days per week.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Carbon Monoxide (CO)	251.68	118.54
Nitrogen Oxides (NO _x)	207.56	101.10
Particulate Matter (PM _{2.5})	24.26	3.07
Particulate Matter (PM ₁₀)	24.26	3.07

Regulated Pollutants	Potential Emissions	2013 Actual Emissions
Total Particulate Matter (TSP)	24.26	3.07
Sulfur Dioxide (SO ₂)	79.04	19.59
Volatile Organic Compounds (VOC)	170.67	148.58

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2013 Actual Emissions
Benzene	1.76	0.68
Hexane	3.92	0.86
Iso-Octane	1.66	0.11
Toluene	8.81	4.51
Ethylbenzene	1.06	0.25
Xylene	4.27	0.99
Isopropyl Benzene	0.46	0.03
Total HAPs	21.94	7.43

Some of the above HAPs may be counted as PM or VOCs.

Title V Program Applicability Basis

This facility has the potential to emit 251.68 tons per year of Carbon Monoxide, 207.56 tons per year of Nitrogen Oxides, and 170.67 tons per year of Volatile Organic Compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, Ergon - West Virginia, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State: 45CSR2	Opacity and PM limits for boilers and heaters
45CSR6	Open burning prohibited
45CSR10	Limit on Sulfur emissions
45CSR11	Standby plans for emergency episodes
45CSR13	Construction Permits
45CSR16	40 CFR Part 60 Performance Standards
WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting
45CSR30	Operating permit requirement
45CSR34	Hazardous Air Pollutants emission standards
40 CFR Part 60 Subpart J and Ja	NSPS for Petroleum Refineries
40 CFR Part 60 Subparts K, Ka, Kb	NSPS for Storage Tanks

	40 CFR Part 60 Subpart GGGa	NSPS for VOC equipment leaks in Petroleum Refineries
	40 CFR Part 60,Subpart VVa	NSPS for VOC equipment leaks in Synthetic Organic Chemicals Manufacturing Industry
	40 CFR Part 60 Subpart QQQ	NSPS for VOC emissions from Petroleum Refinery Wastewater Systems
	40 CFR Part 61 Subpart FF	National Emission Standard for Benzene Waste Operations
	40 CFR Part 61 Subpart M	Asbestos inspection and removal
	40 CFR Part 63 Subpart Y	National Emission Standards for Marine Tank Vessel Loading Operations
	40 CFR Part 63 Subpart ZZZZ	National Emission Standards for Stationary Reciprocating Internal Combustion Engines
	40 CFR Part 82 Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
CO-SIP-95-1	January 9, 1995	
Consent Decree Civil No. 3:03CV114010S	September 30, 2003	
R13-2334X	June 8, 2015	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table," which may be downloaded from DAQ's website.

Determinations and Justifications

This is a second renewal. This renewal also incorporates two minor modifications submitted as MM07 and MM08, which reflect the changes to Permit R13-2334V as R13-2334W and R13-2334X. The following changes have been made since the last permit revision was issued:

- Old Condition 3.1.12. "Reserved" was deleted and the ensuing conditions were renumbered.
- Old Condition 3.1.15. (now 3.1.14.) was amended to include R13-2334W and R13-2334X.
- Condition 3.5.8. had its subparagraphs renumbered as 1. through 4., instead of 4. through 7.
- The Applicable Rules Table in Section 4.0 was amended by separating the requirements for Heaters H-441 and H-701 to make it more clear.

- Conditions 4.3.2., 4.3.4. and 4.3.6. of the old permit were listed as *Reserved*. These conditions were deleted and Conditions 4.3.3. and 4.3.5. were renumbered as 4.3.2. and 4.3.3.
- Condition 6.1.3.b. - the deadline dates in b.1., b.2., and b.3. for the leak definition for pumps have all been passed, therefore the subparagraphs were deleted. The effective date for valves in Condition 6.1.3.a. has also passed and been deleted.
- Changed the order of Sections 8.0, 9.0, and 10.0 to match the NSR permit by request of the company.

40 CFR Part 63, Subpart ZZZZ - The Diesel Firewater pump engines, FWPUMP1 and FWPUMP2, are subject to this MACT. The engines are considered existing (40 CFR §63.6590(a)(iii)), emergency CI engines less than 500 HP and located at an area source. The MACT requirements were added as Section 11.0 with the following exceptions:

MACT Condition	Title V Condition	Change	Reason
40 CFR §63.6603(a)	11.1.1.	Removed reference to Table 2b	Does not apply to CI engines less than 500 hp
40 CFR §63.6625(f)	11.2.1.b.	Removed language about RICE ≤500 HP located at a major source of HAPS	Does not apply
40 CFR §63.6640(b)	11.2.2.b.	Removed language about reporting according to §63.6650 and about changing catalyst	§63.6650 refers to Table 7 which does not apply and the engines do not have catalysts.
40 CFR §63.6640(f)(3)	11.2.2.c.	Removed language about RICE at major sources of HAPS	Does not apply
40 CFR §63.6655(a)(1)	11.4.1.a.1	Removed reference to Initial Notification	Initial Notification not required
40 CFR §63.6655(a)(3)	None	Did not include this requirement	Performance test not required.
40 CFR §63.6655(b), (c)	None	Did not include this requirement	CEMS/CPMS and landfill gas requirements do not apply
40 CFR §63.6655(d)	None	Did not include this requirement	Table 6 did not have recordkeeping requirements for these engines

Permit R13-2334X - issued on June 8, 2015, changed the fugitive emissions limit of the Solvent Dewaxing Unit [MEK-TOL]. The emission limit in Condition 6.1.2 was changed from 4.24 TPY VOC to 9.29 TPY VOC and a Toluene limit of 4.65 TPY was added. Since there were no equipment changes associated with this minor modification, no additional determinations of state rule or federal regulation applicability were necessary.

Permit R13-2334W - issued on November 18, 2014, authorizes the installation of an Ammonia Destruction Unit (ADU), including one new thermal oxidizer [NH3OX], and corrects the emission limits for OXIDIZER and MLDOX for the following criteria pollutants: CO, NO_x, PM/PM₁₀/PM_{2.5}, and SO₂. The following changes incorporate R13-2334W changes:

- The equipment table was modified with the addition of the Ammonia Destruction Unit, Ammonia Destruction Unit Thermal Oxidizer, and Ammonia Destruction Unit Fugitives; reflecting the changes to Permit R13-2334V.
- Section 5.0. heading was changed to include NH3OX.
- The Flare emission table in Condition 5.1.1. was updated to include NH3OX.
- The Table in Condition 5.1.9. was updated to include NH3OX and to change emission limits of CO, NO_x, PM/PM₁₀/PM_{2.5}, and SO₂ for T LOAD OXIDIZER and MLD MLDOX. In addition, the Table was arranged differently to make it fit into the permit better.
- Old permit Conditions 5.1.12. and 5.1.13. were combined in Permit R13-2334W as 5.1.4.a. and b. The Title V permit was changed likewise in Conditions 5.1.12.a. and b.
- Condition 5.1.13. was added to incorporate R13-2334W, Condition 5.1.5.
- Conditions 5.2.2., 5.2.4. and 5.3.3. were updated to include NH3OX.
- Added footnote to table in 5.1.9. that TPM equals tons per month
- Conditions 5.4.4. and 5.5.2. were updated to include NH3OX to agree with R13-2334W, Conditions 5.4.4. and 5.5.3.
- Section 6.0 heading was changed to include ADU.
- Condition 6.1.4. was updated to include ADUFUG.

Applicability of State Rules and Federal Regulations to R13-2334W new equipment:

45CSR6 - Control of Air Pollution from Combustion of Refuse. The NH3OX Thermal Oxidizer is subject to this rule. NH3OX was added to permit condition 5.1.1. which includes the PM emissions limit of 45CSR§6-4.1, the opacity requirements of 45CSR§6-4.3 and the design and operation requirements of 45CSR§6-4.6. The PM limit required by 45CSR§6-4.1 is 1.13 lb/hr. The PM emissions limit required by Permit R13-2334W, Condition 5.1.9. is 0.02 tons/month (0.055 lb/hr) which is well below this limit, therefore compliance with the NSR limit, and the monitoring requirement in Condition 5.2.2., will demonstrate compliance with the Rule 6 limit.

45CSR10 - To Prevent and Control Air Pollution from the Emission of Sulfur Oxides. The NH3OX Thermal Oxidizer is subject to section 4.1 of this rule. Compliance with the Rule 10 limit of 2000 ppm_v in Condition 5.1.2. (equivalent to 0.32 tons/month) will be demonstrated by compliance with the more stringent SO₂ emission limit of 0.01 tons/month in Condition 5.1.9. and the monitoring requirement in Condition 5.2.2.

40 CFR Part 60, Subpart Ja - Standards of Performance for Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced after May 14, 2007. NSPS subpart Ja applies to fuel gas combustion devices, including process heaters, and flares. NH3OX is a thermal oxidizer and is not subject to this rule in accordance with the August 27, 2013, EPA letter of clarification guidance to the American Petroleum Institute (API) regarding NSPS, Subpart Ja.

40 CFR Part 60, Subpart GGGa - Standards of Performance for Equipment Leaks of VOC in Petroleum Refineries for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 and 40 CFR Part 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced after November 7, 2006. EWVI is subject to NSPS subpart GGGa, which refers to the standards of NSPS subpart VVa. The Ammonia Destruction Unit [ADU] will adhere to the applicable provisions of NSPS, Subpart GGGa (VVa) regarding leak detection and repair (LDAR) of VOC fugitive emissions and will demonstrate compliance by demonstrating compliance with the permit requirements that have previously been established for the facility.

40 CFR Part 64 - Compliance Assurance Monitoring. The new equipment does not have potential pre-control device emissions greater than the amount required for a source to be classified as a major source, therefore the equipment is not subject to CAM in accordance with 40 CFR §64.2.(a)(3)

Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

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|-------------------------------------|--|
| 40 CFR Part 60 Subpart Dc | National Standards of Performance for Small Industrial, Commercial, and Institutional Steam Generating Units does not apply to EWVI because although the process heaters, H-101R, H-102R, and H-501R, have maximum design heat inputs between 10 and 100 MMBtu/hr, they do not meet the definition a “steam generating unit.” |
| 40 CFR Part 60 Subpart XX | Standards of Performance for Bulk Gasoline Terminals does not apply to EWVI because the truck loading facility does not meet the definition of “bulk gasoline terminal.” Bulk gasoline terminal means any gasoline facility which receives gasoline by pipeline, ship or barge, and has a gasoline throughput greater than 75,700 liters per day. The gasoline loaded by EWVI is produced on site. |
| 40 CFR Part 60 Subpart RRR | National Standards of Performance for Volatile Organic Compounds (VOC) Emissions from Synthetic Organic Chemicals Manufacturing Industry (SOCMI) Reactor Processes does not apply to EWVI since it does not produce any of the chemicals listed in 40 C.F.R. § 60.707 as a product, co-product, by-product, or intermediate. |
| 40 CFR Part 63 Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, or Institutional Boilers and Process Heaters does not apply to EWVI, since the facility is not a major source of HAPs. |
| 40 CFR Part 63 Subpart BBBB | National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Distribution Bulk Terminals, Bulk Plants, and Pipeline Facilities does not apply to EWVI since the Newell facility is not an area source bulk gasoline bulk terminal, pipeline breakout station, pumping station, or bulk gasoline plant. EWVI produces gasoline on-site through refining processes. |
| 40 CFR Part 63 Subpart JJJJJ | National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers, which is an area source MACT rule, does not apply to EWVI’s boilers and process heaters per 40 CFR § 63.11195 (e), since they are gas fired. |

Request for Variances or Alternatives

None.

Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period

Beginning Date: Wednesday, July 1, 2015

Ending Date: Friday, July 31, 2015

Point of Contact

All written comments should be addressed to the following individual and office:

Bobbie Scroggie
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
Phone: 304/926-0499 ext. 1225 • Fax: 304/926-0478
Bobbie.Scroggie@wv.gov

Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

Not applicable.